

=> file .meeting

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ENTER A FILE NAME OR (IGNORE):ignore

COST IN U.S. DOLLARS

| SINCE FILE | TOTAL |
|------------|---------|
| ENTRY | SESSION |
| 0.21 | 0.21 |

FULL ESTIMATED COST

FILE 'AGRICOLA' ENTERED AT 15:01:01 ON 19 MAY 2004

FILE 'BIOTECHNO' ENTERED AT 15:01:01 ON 19 MAY 2004

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=> c peptide

| | | |
|----|------|------------------|
| L1 | 192 | FILE AGRICOLA |
| L2 | 1090 | FILE BIOTECHNO |
| L3 | 109 | FILE CONFSCI |
| L4 | 6 | FILE HEALSAFE |
| L5 | 0 | FILE IMSDRUGCONF |
| L6 | 553 | FILE LIFESCI |
| L7 | 2 | FILE MEDICONF |
| L8 | 2415 | FILE PASCAL |

TOTAL FOR ALL FILES

L9 4367 C PEPTIDE

=> (C peptide)(P)insulin(P)tracer

L10 1 FILE AGRICOLA

PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH

FIELD CODE - 'AND' OPERATOR ASSUMED 'PEPTIDE) (P) INSULIN'

PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH

FIELD CODE - 'AND' OPERATOR ASSUMED 'INSULIN(P) TRACER'

L11 18 FILE BIOTECHNO

L12 0 FILE CONFSCI

L13 0 FILE HEALSAFE

L14 0 FILE IMSDRUGCONF

L15 0 FILE LIFESCI

PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH

FIELD CODE - 'AND' OPERATOR ASSUMED 'PEPTIDE) (P) INSULIN'
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'INSULIN(P) TRACER'
L16 0 FILE MEDICONF
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'PEPTIDE) (P) INSULIN'
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'INSULIN(P) TRACER'
L17 5 FILE PASCAL

TOTAL FOR ALL FILES
L18 24 (C PEPTIDE) (P) INSULIN(P) TRACER

=> l18 and (second antibody)
L19 0 FILE AGRICOLA
L20 1 FILE BIOTECHNO
L21 0 FILE CONFSCI
L22 0 FILE HEALSAFE
L23 0 FILE IMSDRUGCONF
L24 0 FILE LIFESCI
L25 0 FILE MEDICONF
L26 0 FILE PASCAL

TOTAL FOR ALL FILES
L27 1 L18 AND (SECOND ANTIBODY)

=> d l27 ibib abs total

L27 ANSWER 1 OF 1 BIOTECHNO COPYRIGHT 2004 Elsevier Science B.V. on STN
ACCESSION NUMBER: 1992:22261914 BIOTECHNO
TITLE: A rapid and sensitive radioimmunoassay for the
measurement of proinsulin in human serum
AUTHOR: Bowsher R.R.; Wolny J.D.; Frank B.H.
CORPORATE SOURCE: Lilly Clinical Research Laboratory, Wishard Memorial
Hospital, 1001 West Tenth Street, Indianapolis, IN
46202, United States.
SOURCE: Diabetes, (1992), 41/9 (1084-1090)
CODEN: DIAEAZ ISSN: 0012-1797
DOCUMENT TYPE: Journal; Article
COUNTRY: United States
LANGUAGE: English
SUMMARY LANGUAGE: English
AN 1992:22261914 BIOTECHNO
AB RIA methodology is used widely to measure proinsulin in human serum.
However, some RIAs lack the sensitivity necessary to quantify proinsulin
in unextracted serum and require long incubation periods. We developed an
RIA with a sensitivity of 3.5 pM that permits the routine measurement of
proinsulin in <48 h. This was accomplished by using a nonequilibrium
binding reaction at room temperature and PEG-assisted **second**
antibody precipitation as the method for separating bound and
free proinsulin. We obtained a specific antiproinsulin antibody by
adsorbing the initial goat antiserum with human C-
peptide-agarose. Proinsulin produced 50% displacement of
tracer at 25.6 pM, whereas both human **insulin** and
C-**peptide** failed to displace **tracer** at
concentrations as high as 1 µM. We evaluated several cleaved
derivatives of proinsulin for cross-reactivity with the antibody.
B-chain-C-**peptide** cleaved derivatives (<=50%
cross-reactivity) were more potent than A-chain-C-
peptide cleaved derivatives (<5% cross-reactivity). However, all
derivatives cleaved in the region from 56-60 failed to cross-react with
the antiserum. These data indicate that a major antigenic determinant is
present on the C- **peptide** region of proinsulin
adjacent to the A-chain-C-**peptide** junction. After

administration of an oral glycemic challenge, the mean fasting serum concentration of proinsulin in normal adults rose from 4.1 ± 0.28 to 23.6 ± 3.8 pM. We found a significant difference in the proinsulin concentrations in 6 adults before and after a glycemic challenge when two different antibodies were used in the RIA. Based on the antibodies different specificity for proinsulin, we concluded that B-chain-C-peptide junctional split forms of proinsulin comprise a significant portion of circulating proinsulin material after a glycemic challenge.

=> file .chemistry
COST IN U.S. DOLLARS

| SINCE FILE | TOTAL |
|------------|---------|
| ENTRY | SESSION |
| 8.48 | 8.69 |

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 15:04:02 ON 19 MAY 2004
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=> (c peptide)(P)insulin(P)tracer(P)(second antibody)
L28 2 FILE CAPLUS
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'PEPTIDE)(P)INSULIN'
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'INSULIN(P)TRACER'
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'TRACER(P)(SECOND'
L29 1 FILE BIOTECHNO
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'PEPTIDE)(P)INSULIN'
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'INSULIN(P)TRACER'
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'TRACER(P)(SECOND'
L30 0 FILE COMPENDEX
L31 0 FILE ANABSTR
L32 0 FILE CERAB
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'PEPTIDE)(P)INSULIN'
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'INSULIN(P)TRACER'
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH

FIELD CODE - 'AND' OPERATOR ASSUMED 'TRACER(P) (SECOND'
L33 0 FILE METADEX
L34 0 FILE USPATFULL

TOTAL FOR ALL FILES

L35 3 (C PEPTIDE) (P) INSULIN(P) TRACER(P) (SECOND ANTIBODY)

=> dup rem'

ENTER REMOVE, IDENTIFY, ONLY, OR (?):remove

ENTER L# LIST OR (END):l35

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You have entered a file name of duplicates to keep that is not referenced by any of the L#s specified for this DUPLICATE command. The file names of duplicates that can be kept are listed above. Please enter one of these file names.

=> d l35 ibib abs total

L35 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:320215 CAPLUS

DOCUMENT NUMBER: 134:339540

TITLE: A new immunologic assay to determine C-peptide containing impurities in samples of human insulin and derivatives thereof

INVENTOR(S): Gerl, Martin; Steinert, Cornelia

PATENT ASSIGNEE(S): Aventis Pharma Deutschland G.m.b.H., Germany

SOURCE: PCT Int. Appl., 51 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| WO 2001031336 | A2 | 20010503 | WO 2000-EP10482 | 20001025 |
| WO 2001031336 | A3 | 20011108 | | |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

| | | | | |
|------------|----|----------|----------------|----------|
| EP 1228374 | A2 | 20020807 | EP 2000-974449 | 20001025 |
|------------|----|----------|----------------|----------|

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL

| | | | | |
|---------------|----|----------|----------------|----------|
| JP 2003513243 | T2 | 20030408 | JP 2001-533423 | 20001025 |
|---------------|----|----------|----------------|----------|

PRIORITY APPLN. INFO.: DE 1999-19951684 A 19991027

WO 2000-EP10482 W 20001025

AB The invention relates to a process for detecting or determining a C-peptide-containing impurity in a sample of recombinantly produced human insulin or a derivative thereof, by a non-radioactive assay, comprising the steps: (a) preparing a sample of recombinantly produced human insulin or a derivative thereof; (b) mixing the samples with dilution buffer; (c) adding a tracer to mixture (b); (d) adding antibody specific for the C-peptide impurity to mixture (c); (e) adding "C-peptide second antibody bead" having at least one label to mixture (d); and (f) detecting or determining the presence of the C-peptide-containing impurity.

L35 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1992:564015 CAPLUS
DOCUMENT NUMBER: 117:164015
TITLE: A rapid and sensitive radioimmunoassay for the measurement of proinsulin in human serum
AUTHOR(S): Bowsher, Ronald R.; Wolny, James D.; Frank, Bruce H.
CORPORATE SOURCE: Dep. Drug Disposit. Bioanal. Res., Eli Lilly and Co., IN, USA
SOURCE: Diabetes (1992), 41(9), 1084-90
CODEN: DIAEAZ; ISSN: 0012-1797
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Although RIA methodol. is used widely to measure proinsulin in human serum, some RIAs lack the sensitivity necessary to quantify proinsulin in unextd. serum and require long incubation periods. An RIA with a sensitivity of 3.5 pM was developed which permits the routine measurement of proinsulin in <48 h. This was accomplished by using a nonequil. binding reaction at room temperature and PEG-assisted **second antibody** precipitation as the method for separating bound and free proinsulin. A specific anti-proinsulin antibody was obtained by adsorbing the initial goat antiserum with human **C-peptide**-agarose. Proinsulin produced 50% displacement of **tracer** at 25.6 pM, whereas both human **insulin** and **C-peptide** failed to displace **tracer** at concns. as high as 1 μ M. Several cleaved derivs. of proinsulin were evaluated for cross-reactivity with the antibody. B-chain-**C-peptide** cleaved derivs. ($\leq 50\%$ cross-reactivity) were more potent than A-chain- **C-peptide** cleaved derivs. ($< 5\%$ cross-reactivity). However, all derivs. cleaved in the region from 56-60 failed to cross-react with the antiserum. These data indicate that a major antigenic determinant is present on the **C-peptide** region of proinsulin adjacent to the A-chain-**C-peptide** junction. After administration of an oral glycemic challenge, the mean fasting serum concentration of proinsulin in normal adults rose from 4.1 to 23.6 pM. Differences in the proinsulin concns. in 6 adults before and after a glycemic challenge were found when 2 different antibodies were used in the RIA. Based on the antibodies different specificities for proinsulin, B-chain-**C-peptide** junctional split forms of proinsulin material apparently comprise a significant portion of circulating proinsulin material after a glycemic challenge.

L35 ANSWER 3 OF 3 BIOTECHNO COPYRIGHT 2004 Elsevier Science B.V. on STN

ACCESSION NUMBER: 1992:22261914 BIOTECHNO
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AUTHOR: Bowsher R.R.; Wolny J.D.; Frank B.H.
CORPORATE SOURCE: Lilly Clinical Research Laboratory, Wishard Memorial Hospital, 1001 West Tenth Street, Indianapolis, IN 46202, United States.
SOURCE: Diabetes, (1992), 41/9 (1084-1090)
CODEN: DIAEAZ ISSN: 0012-1797
DOCUMENT TYPE: Journal; Article
COUNTRY: United States
LANGUAGE: English
SUMMARY LANGUAGE: English

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